## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (currently amended) A compound of the formula:

$$G \xrightarrow{\mathbb{R}^2} \mathbb{R}^3 \xrightarrow{\mathbb{R}^3} \mathbb{R}^1$$

or a pharmaceutically acceptable salt thereof, wherein:

A is CH or nitrogen;

B is  $-CH_2-$ ,  $-CF_2-$ ,  $NR_4$  or O, with the proviso that when A is N, B is  $-CH_2-$ , -CHF- or  $-CF_2-$ ;

G is oxygen,

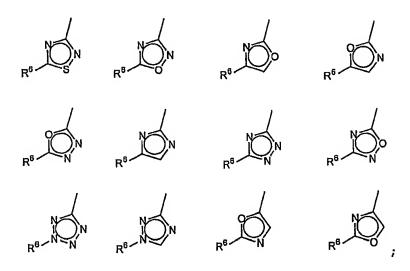
R<sub>1</sub> is hydrogen or C<sub>I-6</sub> alkyl;

R₂ is C₁-8 alkyl, -CH₂-aryl, CH₂-heterocycle,-CH₂-substituted C₅ cycloalkyl, or a –CH₂-substituted hetero cycle, each of which may be optionally substituted with one or more of halo, hydroxyl,

 $C_{l-6}$  alkyl,  $C_{l-6}$  haloalky,  $C_{1-8}$  alkoxy,  $C_{l-6}$  haloalkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  haloalkynyl;

 $\mathsf{R}_3$  is hydrogen; cyclobutyl, cyclopropyl, methyl, ethyl, isopropyl, butyl, secbutyl;

R<sub>5</sub> is a 5-membered unsaturated heterocyclic ring having one of the following structures:



R<sub>6</sub> is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; or

 $R_5$  may also be  $C_2$ - $C_4$ -aralkyl, - $CH_2$ -O- $R_7$  where  $R_7$  is  $C_{1^-6}$  alkyl,  $C_2$ - $G_4$  aralkyl which groups may be optionally substituted with fluoro or hydroxy; and

 $\mbox{R}_{8}$  is hydrogen phenyl or halo-substituted phenyl; with the proviso that when either  $\mbox{R}_{3}$  or  $\mbox{R}_{8}$  is not hydrogen, the other is hydrogen.

## 2. (cancel)

3. (previously presented) A compound according to claim 1, wherein R<sub>1</sub> is H;

 $R_2 \text{ is -CH}_2\text{-aryl optionally substituted with one or more of halo,} \\ \text{hydroxy, } C_{1\text{-}6} \text{ alkyl, } C_{1\text{-}6} \text{ haloalkyl, } C_{1\text{-}8} \text{ alkoxy, } C_{1\text{-}6} \text{ haloalkoxy,} \\ C_{2\text{-}6} \text{ alkenyl, } C_{2\text{-}6} \text{ haloalkeny1, } C_{2\text{-}6} \text{ alkynyl or } C_{2\text{-}6} \text{ haloalkynyl;} \\$ 

R<sub>3</sub> is hydrogen or cyclobutyl;

R<sub>5</sub> is one of the following 5-membered unsaturated heterocyclic ring structures:

R<sub>6</sub> is phenyl, phenylamino substituted by one or more halo, phenylmethyl substituted by one or more halo, or phenethyl substituted by one or more halo; and

R<sub>8</sub> is hydrogen or a fluoro-substituted phenyl.

4. (previously presented) A compound according to claim 3, wherein  $R_2 \text{ is -CH}_2\text{-}C_6H_5 \text{ or -CH}_2\text{-heterocyclic aryl each of which may be}$  optionally substituted with one or more of halo, hydroxy,  $C_{\text{I-6}}$  alkyl,  $C_{\text{I-6}}$  haloalkoxy,  $C_{\text{I-6}}$  haloalkoxy,  $C_{\text{2-6}}$  alkenyl,  $C_{\text{2-6}}$  haloalkynyl;

R<sub>3</sub> is H;

R<sub>5</sub> is one of the following 5-membered unsaturated heterocyclic ring structures:

R<sub>6</sub> is a meta chloro-substituted phenylamino, a meta chloro-substituted phenylmethy or a meta chloro-substituted phenethyl; and

R<sub>8</sub> is 3,5-difluorophenyl.

5. (previously presented) A compound according to claim 1, wherein

A is CH;

B is -CH<sub>2</sub>-;

G is oxygen;

R<sub>1</sub> is hydrogen;

 $R_2$  is  $C_{1-8}$  alkyl or -CH<sub>2</sub>-aryl (optionally substituted by one or more of halo, hydroxy,  $C_{1-6}$  alkyl,  $C_{1-6}$  haloalkyl,  $C_{1-8}$  alkoxy,  $C_{1-6}$  haloalkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  haloalkenyl,  $C_{2-6}$  haloalkyny);

R<sub>3</sub> is cyclobutyl or H, and

 $\ensuremath{\mathsf{R}}_5$  is one of the following 5 -membered unsaturated heterocyclic ring structures:

6. (previously presented) A compound according to claim 1, in which A is CH;

B is O;

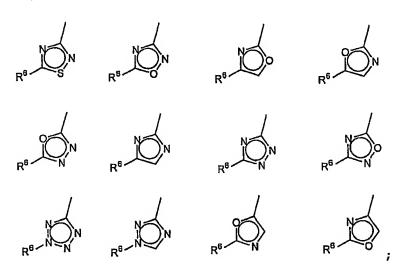
G is oxygen;

R<sub>1</sub> is hydrogen;

 $R_2$  is  $C_{1-8}$  alkyl, -CH<sub>2</sub>-aryl (optionally substituted by one or more of halo, hydroxy,  $C_{l^-6}$  alkyl,  $C_{l^-6}$  haloalkyl,  $C_{1-8}$  alkoxy,  $C_{l^-6}$  haloalkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  haloalkenyl,  $C_{2-6}$  haloalkyl);

R<sub>3</sub> is cyclobutyl or H; and

 $R_5$  is  $-CH_2-O-CH_3$ ,  $-CH_2-O-CH_2-CH_2-C_6H_5$  or one of the following 5-membered unsaturated heterocyclic ring structures:



7. (previously presented) A compound according to claim 1, wherein .

A is CH;

B is NH;

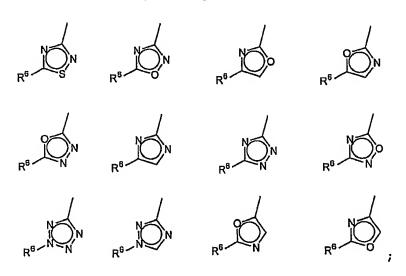
G is oxygen;

R<sub>1</sub> is hydrogen;

 $R_2 \text{ is } C_{1^-8} \text{ alkyl, -CH}_2\text{-aryl, a -CH}_2\text{-heterocyclic group or a} \\ -CH_2\text{-substituted } C_5 \text{ cycloalkyl (optionally substituted by one or more of halo, hydroxy, } C_{1^-6} \text{ alkyl, } C_{1^-6} \text{ haloalkyl, } C_{1^-8} \text{ alkoxy, } C_{1^-6} \text{ haloalkoxy, } C_{2^-6} \text{ alkenyl, } C_{2^-6} \text{ haloalkenyl, } C_{2^-6} \text{ alkynyl or } C_{2^-6} \text{ haloalkynyl);}$ 

R<sub>3</sub> is cyclobutyl or H; and

 $R_5$  is  $-CH_2-O-CH_3$ ,  $-CH_2-O-CH_2-CH_2-C_6H_5$  or one of the following 5-membered unsaturated heterocyclic ring structures:



8. (previously presented) A compound according to claim 1, wherein

A is N;

B is  $-CH_2-$ ;

G is oxygen;

R<sub>1</sub> is hydrogen;

 $R_2$  is  $C_{l^-8}$  alkyl, - $CH_2$ -aryl, a - $CH_2$ -heterocyclic group or a - $CH_2$ -substituted  $C_5$  cycloalkyl (optionally substituted one or more of halo, hydroxy,  $C_{l^-6}$  alkyl,  $C_{l^-6}$  haloalkyl,  $C_{1^-8}$  alkoxy,  $C_{1^-6}$  haloalkoxy,  $C_{2^-6}$  alkenyl,  $C_{2^-6}$  haloalkynyl);

R<sub>3</sub> is cyclobutyl or H;

R<sub>5</sub> is one of the following 5-membered unsaturated heterocyclic ring structures:

and

R<sub>8</sub> is H or phenyl (optionally substituted with halo).

9. (previously presented) A compound according to claim 1, wherein

A is N;

B is -CH<sub>2</sub>-:

G is oxygen;

R<sub>1</sub> is hydrogen;

 $R_2$  is  $C_{1^-8}$  alkyl - $CH_2$ -aryl, a - $CH_2$ -heterocyclic group or a - $CH_2$ -substituted  $C_5$  cycloalkyl (optionally substituted by one or more of halo, hydroxy,  $C_{1^-6}$  alkyl,  $C_{1^-6}$  haloalky,  $C_{1^-8}$  alkoxy,  $C_{1^-6}$  haloalkoxy,  $C_{2^-6}$  alkenyl,  $C_{2^-6}$  haloalkenyl,  $C_{2^-6}$  alkynyl or  $C_{2^-6}$  haloalkynyl);

R<sub>3</sub> is cyclobutyl or H; and

 $R_5$  is  $-CH_2-O-CH_3$ ;

10. (previously presented) A compound according to claim 1, wherein

A is N;

B is  $-CH_2-$ ;

R<sub>1</sub> is hydrogen;

R<sub>3</sub> is hydrogen or cyclobutyl;

R<sub>5</sub> is one of the following 5-membered unsaturated heterocyclic ring structures:

and R<sub>8</sub> is phenyl,3,5-difluorophenyl or H.

11. (original) A compound according to claim 1, having the formula:

- 12. (previously presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 1.
- 13. (cancel)
- 14. (currently amended) A method <u>for the manufacture of manufacturing</u> of a pharmaceutical for the modification of <u>an</u> acetylcholine or <u>a</u> muscarinic receptor comprising the step of placing the compound of claim 1 into a pharmaceutical composition in a unit dosage form.
- 15. (currently amended) The method of claim 14, wherein the pharmaceutical is for the treatment of is for Alzheimer's disease.
- 16. (currently amended) A method of modifying <u>a</u> muscarinic acetylcholine receptor <u>or an acetylcholine receptor</u> comprising the administration of a therapeutically effective amount of a compound as claimed in claim 1 to a subject in need thereof.

## 17. (currently amended) A compound of the formula:

$$G \xrightarrow{\mathbb{R}^2} \mathbb{R}^3 \xrightarrow{\mathbb{R}^3} \mathbb{R}^1$$

or a pharmaceutically acceptable salt thereof, wherein:

A is CH or nitrogen;

B is  $-CH_2-$ , -CHF-,  $-CF_2-$ ,  $NR_4$  or O, with the proviso that when A is N, B is  $-CH_2-$ , -CHF- or  $-CF_2-$ ;

G is oxygen or =N-CN,

R<sub>1</sub> is hydrogen or C<sub>I-6</sub> alkyl;

 $R_2$  is hydrogen;  $C_{1-10}$  alkyl optionally substituted with  $C_{I-6}$  alkoxy or halogen; aralkyl, a --CH<sub>2</sub>-heterocycle or a --CH<sub>2</sub>-C<sub>5</sub> cycloalkyl ring each of which may be optionally substituted with one or more of halo, hydroxyl,  $C_{I-6}$  alkyl,  $C_{I-6}$  haloalky,  $C_{1-8}$  alkoxy,  $C_{I-6}$  haloalkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  haloalkynyl;

 $R_3$  is a cyclic alkyl radical containing from 3-6 carbon atoms or a  $C_1$ - $C_6$  alkyl;

R4 is hydrogen or lower alkyl;

R5 is a 5-membered unsaturated heterocyclic ring <u>optionally substituted by</u> a group selected from<del>and</del>

R6 is <u>llower</u> alkyl; <u>hydrogen</u>; arylamino optionally substituted with one or more of halo, hydroxy, C1-6 alkyl, Cl-6 haloalkyl, C1-6 alkoxy, C1-6 haloalkoxy, C2-6 alkenyl,  $C_{2^{-6}}$  haloalkenyl,  $C_{2^{-6}}$  alkynyl or  $C_{2^{-6}}$  haloalkynyl; aralkyl optionally substituted with one or more of halo, hydroxy,  $C_{1^{-6}}$  alkyl,  $C_{1^{-6}}$  haloalkyl,  $C_{1^{-6}}$  alkoxy,

 $C_{1^-6}$  haloalkoxy,  $C_{2^-6}$  alkenyl,  $C_{2^-6}$  haloalkenyl,  $C_{2^-6}$  alkynyl or  $C_{2^-6}$  haloalkynyl; or a group of formula:



wherein n is an integer in the range from 1 to 4 and HET is a heterocyclic group optionally substituted with one or more of halo, hydroxy,  $C_{l^{-}6}$  alkyl,  $C_{l^{-}6}$  haloalkyl,  $C_{l^{-}6}$  alkoxy,  $C_{1^{-}6}$  haloalkoxy,  $C_{2^{-}6}$  alkenyl,  $C_{2^{-}6}$  haloalkynyl or  $C_{2^{-}6}$  haloalkynyl;

or  $R_5$  may also be  $C_2$ - $C_4$ -aralkyl, - $CH_2$ -O- $R_7$  where  $R_7$  is  $C_{1^-6}$  alkyl,  $C_{2^-6}$  alkenyl,  $C_{2^-6}$  alkynyl,  $C_2$ - $C_4$  aralkyl which groups may be optionally substituted with fluoro or hydroxy; and

 $R_8$  is hydrogen or aryl (optionally substituted with one or more of halo, hydroxyl,  $C_{l^-6}$  alkyl,  $C_{l^-6}$  haloalky,  $C_{1^-6}$  alkoxy,  $C_{l^-6}$  haloalkoxy,  $C_{2^-6}$  alkenyl,  $C_{2^-6}$  haloalkenyl,  $C_{2^-6}$  alkynyl or  $C_{2^-6}$  haloalkynyl); with the proviso that when either R3 or R8 is not hydrogen, the other is hydrogen.